

**ABSTRACT**

A data structure encoded on a surface of an object, and a method of generating such a data structure. The data structure includes a plurality of block data regions. Each of the block regions includes an encoded data region containing data in encoded form, a clock mark structure located adjacent a first peripheral portion of the encoded data region, and a target structure located adjacent the clock mark structure. Each of the block data regions further includes an orientation data structure indicative of an orientation of the data structure.